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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,300	09/10/1999	MOHAMED ANISUR RAHMAN	2925-237P	2520
30594	7590	03/06/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			PHAN, HUY Q	
P.O. BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	
			2687	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/393,300	Applicant(s) RAHMAN, MOHAMED ANISUR	
	Examiner Huy Q. Phan	Art Unit 2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13,15-19,32-45 and 47 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13,15-19,32-45 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Amendment filed on date: 01/27/2006.
Claims 13, 15-19, 32-45 and 47 are still pending.

Response to Arguments

2. Applicant's arguments filed 01/27/2006 have been fully considered but they are not persuasive.

The applicant argues that Sayers et al. does not disclose two wireless systems. The examiner respectfully disagrees. The applicant is correct in his/her assertion that element 11 and 11' are cell coverage areas, which is a sub-component of a wireless system. However, element 11 is a sub-component of the public wireless network, a first wireless system; and element 11' is a sub-component of the private network, a second wireless system. Therefore, Sayers et al. teach controlling two cell coverage areas from two distinct wireless systems.

With all the reasons stated above, the rejection is deemed proper and still stands.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 15-19, 32-45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connolly et al. (5,657,375) in view of Sayers et al. (US-6,539,237) (both are previously cited).

Regarding claim 13, Connolly et al. disclose a system for directing a data message in a hybrid communications network (fig. 1 and its description), including a first radio cell coverage area and a second radio cell coverage area (col. 5, lines 5-22), the system comprising:

a central database (SCP 18), independent of the first and second radio cell coverage area, the central database configured to send update information to update a user profile in the first radio cell coverage area in response to service for a mobile station being transferred from the first radio cell coverage area to the second radio cell coverage area (fig. 8 and cols. 23-25), the user profile being updated to indicate that data messaging services are being provided to the mobile station by the second radio cell coverage area based on received transfer information, the transfer information including deregistration information from the first wireless system (fig. 8 and cols. 23-25); and

a service node (STP) for directing a data message for a mobile station through the second radio cell coverage area, as facilitated by the updated user profile, to deliver the data message to the mobile station during its operation on the second radio cell coverage area (fig. 9 and cols. 25-26). But, Connolly et al. fail to expressly teach wherein the first radio cell coverage area is the first wireless system and the second

radio cell coverage area is the second wireless system. However in analogous art, Sayers et al. teach wherein the first radio cell coverage area (fig. 1, cell 11) is the first wireless system (fig. 1, public wireless network 15) and the second radio cell coverage area (fig. 1, cell 11') is the second wireless system (fig. 1, private wireless network 14). Since, Connolly et al. and Sayers et al. are related to the wireless communications system; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Connolly et al. as taught by Sayers et al. in order to permit "users to operate freely in both public and private wireless networks using standard mobile stations while achieving high private network data rates. The communication system typically uses normal wireless handsets or other mobile or fixed stations without need or any modifications" (see Sayers et al.'s specification col. 7, lines 35-40).

Regarding claim 32, Connolly et al. disclose a method of managing data messages (fig. 1 and its description; also see col. 5, lines 5-22), comprising:

sending deregistration data including at least one of a mobile switching center identifier and a cell identifier from a first radio cell coverage area (col. 24, lines 14-67) to a central database (SCP 18) based on a mobile station transferring from the first radio cell coverage area to a second radio cell coverage area (col. 9, lines 8-59), the central database being independent of the first and second radio cell coverage area and being a database for indicating which wireless system provides data messaging services for the mobile station (fig. 8 and col. 25, lines 2-37);

receiving update information for the mobile station from the central database, the update information including an identifier of the second wireless system (col. 25, lines 2-37); and

updating a user profile of the mobile station in at least one of a home location register and a visitor location register based on the received update information, the user profile being updated to indicate that the second radio cell coverage area provides data messaging services to the mobile station (col. 25, lines 2-37). But, Connolly et al. fail to expressly teach wherein the first radio cell coverage area is the first wireless system and the second radio cell coverage area is the second wireless system. However, Sayers et al. teach wherein the first radio cell coverage area (fig. 1, cell 11) is the first wireless system (fig. 1, public wireless network 15) and the second radio cell coverage area (fig. 1, cell 11') is the second wireless system (fig. 1, private wireless network 14). Since, Connolly et al. and Sayers et al. are related to the wireless communications system; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Connolly et al. as taught by Sayers et al. in order to permit "users to operate freely in both public and private wireless networks using standard mobile stations while achieving high private network data rates. The communication system typically uses normal wireless handsets or other mobile or fixed stations without need or any modifications" (see Sayers et al.'s specification col. 7, lines 35-40).

Regarding claim 38, Connolly et al. disclose a method of managing data messages (fig. 1 and its description), comprising:

sending registration data from a first radio cell coverage area to a central database (SCP 18) based on a mobile station transferring from a second radio cell coverage area (col. 5, lines 5-22) to the first wireless system (col. 25, lines 2-37), the central database being independent of the first and second radio cell coverage area and being a database (SCP 18) for updating a user profile in at least the second radio cell coverage area which wireless system provides data messaging services for the mobile station, the central database further configured to receive and store a signaling message containing deregistration information including at least one of a mobile switching center identifier and a cell identifier (col. 24, lines 14-67) from the second wireless system (col. 25, lines 2-37); and

receiving a data message for the mobile station from a service node (STP), the service node directing the data message based on the updated user profile in the second radio cell coverage area (col. 25, lines 2-37). But, Connolly et al. fail to expressly teach wherein the first radio cell coverage area is the first wireless system and the second radio cell coverage area is the second wireless system. However in analogous art, Sayers et al. teach wherein the first radio cell coverage area (fig. 1, cell 11) is the first wireless system (fig. 1, public wireless network 15) and the second radio cell coverage area (fig. 1, cell 11') is the second wireless system (fig. 1, private wireless network 14). Since, Connolly et al. and Sayers et al. are related to the wireless communications system; therefore, it would have been obvious to one of ordinary skill in

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the art at the time the invention was made to modify the system of Connolly et al. as taught by Sayers et al. in order to permit "users to operate freely in both public and private wireless networks using standard mobile stations while achieving high private network data rates. The communication system typically uses normal wireless handsets or other mobile or fixed stations without need or any modifications" (see Sayers et al.'s specification col. 7, lines 35-40).

Regarding claim 44, Connolly et al. disclose a method of managing data messages, comprising:

receiving information based on a mobile station transferring from a first radio cell coverage area to a second radio cell coverage area (col. 5, lines 5-22), the received information including deregistration data (col. 25, lines 2-37), the deregistration data including at least one of a mobile switching center identifier and a cell identifier from the first radio cell coverage area and registration data from the second radio cell coverage area (col. 24, lines 14-67);

updating a central database (SCP 18) based on the received information (col. 26, lines 8-59), the central database being independent of the first and second radio cell coverage area and being a database for indicating which wireless system provides data messaging services for the mobile station (col. 25, lines 2-37); and

sending update information to the first radio cell coverage area (col. 25, lines 2-37), the update information being used by the first radio cell coverage area to update a user profile of the mobile station in at least one of a home location register and a visitor

location register to indicate that the second radio cell coverage area provides data messaging services to the mobile station (col. 26, lines 8-59). But, Connolly et al. fail to expressly teach wherein the first radio cell coverage area is the first wireless system and the second radio cell coverage area is the second wireless system. However, Sayers et al. teach wherein the first radio cell coverage area (fig. 1, cell 11) is the first wireless system (fig. 1, public wireless network 15) and the second radio cell coverage area (fig. 1, cell 11') is the second wireless system (fig. 1, private wireless network 14); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Connolly et al. as taught by Sayers et al. in order to permit "users to operate freely in both public and private wireless networks using standard mobile stations while achieving high private network data rates. The communication system typically uses normal wireless handsets or other mobile or fixed stations without need or any modifications" (see Sayers et al.'s specification col. 7, lines 35-40).

Regarding claim 15, Connolly et al. and Sayers et al. disclose the system according to claim 13. Connolly et al. disclose the system further comprising an authenticator for authenticating the mobile station during or after the transfer from the first wireless system to the second wireless system (fig. 9 and col. 25, lines 63-65).

Regarding claim 34, Connolly et al. and Sayers et al. disclose the system according to claim 32. Connolly et al. further disclose wherein the step of sending

deregistration data includes sending a signaling message to the central database during or after the transferring of the mobile station (col. 24, lines 14-67), the signaling message including a mobile identifier and information identifying the first wireless system (col. 21, lines 8-65).

Regarding claims 16 and 35, Connolly et al. and Sayers et al. disclose the system according to claims 13 and 34, respectively. Sayers et al. teach wherein the first wireless system is a public wireless system (fig. 1); while, Connolly et al. further disclose the step of sending deregistration data includes sending at least one of a mobile switching center identifier and a cell identifier as the information identifying the first wireless system (col. 24, lines 14-67).

Regarding claim 17, Connolly et al. and Sayers et al. disclose the system according to claim 13. Sayers et al. teach wherein the second wireless system is a private wireless system (fig. 1 and description); while, Connolly et al. disclose the system which is assigned a private system identifier number based on a geographic location of the private wireless system (col. 21, lines 8-67), and the central database is configured to receive and store a signaling message containing registration information from the second wireless system (col. 21, lines 8-67), the registration information including the private system identifier (fig. 6 and cols. 21-22).

Regarding claim 18, Connolly et al. and Sayers et al. disclose the system according to claim 13. Sayers et al. teach wherein the second wireless system is a private wireless system (fig. 1 and description); while, Connolly et al. disclose wherein the system includes a private branch exchange (cols. 1-2) for assigning a private system identifier for the private wireless system based on geographic coordinates of the mobile station within the private wireless system (col. 21, lines 8-26), and the central database is configured to receive and store a signaling message containing registration information from the second wireless system, the registration information including the private system identifier (fig. 6 and cols. 21-22).

Regarding claim 19, Connolly et al. and Sayers et al. disclose the system according to claim 13. Connolly et al. disclose the system further comprising a service control point (SCP 18) for maintaining the user profile (fig. 8 and col. 25, lines 2-37).

Regarding claim 33, Connolly et al. and Sayers et al. disclose the system according to claim 32. Connolly et al. disclose the system further comprising: sending the identifier of the second wireless system to a service node in response to the service node querying the home location register (col. 21, lines 8-65), the service node using the identifier to redirect a data message to the mobile station (col. 24, lines 14-67).

Regarding claim 36, Connolly et al. and Sayers et al. disclose the system according to claim 32. Connolly et al. disclose the system further comprising:

cooperating, at the first wireless system, with the second wireless system to transfer service to the second wireless system, if a signal parameter measured at the mobile station satisfies a first transfer condition (col. 5, lines 5-22).

Regarding claim 37, Connolly et al. and Sayers et al. disclose the system according to claim 36. Connolly et al. disclose the system further comprising: cooperating, at the first wireless system, with the second wireless system to transfer service back to the first wireless system, if the signal parameter measured at the mobile station satisfies a second transfer condition (col. 5, lines 5-22).

Regarding claim 39, Connolly et al. and Sayers et al. disclose the system according to claim 38. Connolly et al. disclose the system further comprising: sending the received data message to the mobile station (col. 25, lines 2-37).

Regarding claim 40, Connolly et al. and Sayers et al. disclose the system according to claim 38. Connolly et al. further disclose wherein the step of sending registration data includes sending a signaling message to the central database during or after the transferring of the mobile station (col. 21, lines 8-65), the signaling message including a mobile identifier and information identifying the first wireless system (col. 24, lines 14-67).

Regarding claim 41, Connolly et al. and Sayers et al. disclose the system according to claim 40. Sayers et al. teach wherein the second wireless system is a private wireless system (fig. 1 and description); while, Connolly et al. further disclose the step of sending registration data includes sending a private system identifier as the information identifying the first wireless system (col. 21, lines 8-67), the private system identifier being assigned based on a geographic location within the coverage area of the first wireless system (fig. 8 and cols. 23-25).

Regarding claim 42, Connolly et al. and Sayers et al. disclose the system according to claim 38. Connolly et al. disclose the system further comprising the step of: cooperating, at the first wireless system, with the second wireless system to transfer service to the first wireless system, if a signal parameter measured at the mobile station satisfies a first transfer condition (col. 5, lines 5-22).

Regarding claim 43, Connolly et al. and Sayers et al. disclose the system according to claim 42. Connolly et al. disclose the system further comprising the step of: cooperating (col. 5, lines 5-22), at the first wireless system, with the second wireless system to transfer service back to the second wireless system, if the signal parameter measured at the mobile station satisfies a second transfer condition (col. 21, lines 8-67).

Regarding claim 45, Connolly et al. and Sayers et al. disclose the system according to claim 44. Connolly et al. disclose the system further comprising: receiving

at a service node a data message for the mobile station (fig. 1 and its description); querying the first wireless system based on the received data message (figs. 8-12 and their descriptions); receiving an indication from the first wireless system that the second wireless system is providing data messaging services to the mobile station (fig. 8 and cols. 23-25); and directing a data message for the mobile station from the service node to the second wireless system (fig. 9 and cols. 25-26).

Regarding claim 47, Connolly et al. and Sayers et al. disclose the system according to claim 44. Connolly et al. disclose the system further comprising: receiving at a service node a data message for the mobile station (fig. 1 and its description); querying the central database based on the received data message (figs. 8-12 and their descriptions); receiving an indication from the central database that the second wireless system is providing data messaging services to the mobile station (fig. 8 and cols. 23-25); and directing a data message for the mobile station from the service node to the second wireless system (fig. 9 and cols. 25-26).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Huang discloses "When a MT moves out of the proximity of a first BS and into the proximity of a second BS, the MT and BSs perform a handoff procedure. Under the handoff procedure, the MT issues a packet to the first BS. In response, the first BS

deregisters the MT from its registration database. The MT also issues a packet to the new BS including its data-link layer address (illustratively, the MTs are IEEE compliant and use MAC addresses as their data-link layer address). In response, the second BS registers the MT in its registration database. During the handoff, the MT knows the VLAN-ID of the new VLAN containing the second BS" (see col. 9).

b) Maupin discloses "The home HLR 90 further instructs the first MSC/VLR 40(1) to deregister the subscriber record pertaining to the mobile station 30 by transmitting the Cancel.sub.-- Location signal. Thereinafter, the first MSC/VLR 40(1) no longer provides mobile service to the mobile station 30 unless the mobile station 30 roams back into the first MSC/VLR coverage area" (see specification).

c) McDonald discloses "Once the mobile subscriber 109 nears the edge of the first coverage area 105 during its call... The subscriber 109 informs the user that it has lost the call, because it had to leave the voice channel of the first base station 113 of the first coverage area for the control channel of the first base station 119 of the second coverage area. The central controller 101 acknowledges the request and tries to continue the call... The subscriber 109 then deregisters from the new site 107, informs the central controller 101 that it is returning to the previous channel 113, and attempts to receive on the previous channel 113. A selectable feature of the present invention is to deallocate the channel 113 at the old site 105 only after a specified time-out, not immediately after hand-off, to allow the user the option of returning to the old channel 113 for call completion" (see specification).

5. **THIS ACTION IS MADE FINAL.**

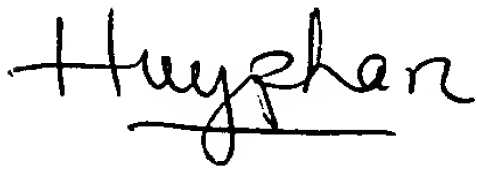
Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 571-272-7924. The examiner can normally be reached on 8AM-6PM.

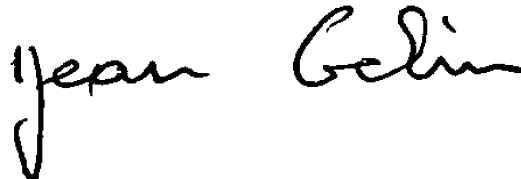
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Examiner: Phan, Huy Q.

JEAN GELIN
PRIMARY EXAMINER



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Date: 02/27/2006